REMARKS

At the time of the Office Action dated April 22, 2004, claims 2-6, 13 and 16-18 were pending in this application. Of those claims, claims 2, 4, 13, and 16-17 have been rejected. Applicants acknowledge, with appreciation, the Examiner's allowance of claims 3, 5-6, and 18. Independent claim 13 has been cancelled, and claim 19 has been added. Applicants submit that the present Amendment does not generate any new matter issue.

CLAIM 13 IS REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON TSUDA ET AL., U.S. PATENT NO. 6,262,783 (HEREINAFTER TSUDA) IN VIEW OF SHIMADA ET AL. U.S. PATENT NO. 6,052,162 (HEREINAFTER SHIMADA), AND MEI ET AL., U.S. PATENT NO. 6,140,668 (HEREINAFTER MEI)

Claim 13 has been cancelled, and thus, the rejection of claim 13 is moot.

CLAIM 16 IS REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON TSUDA IN VIEW OF SHIMADA, KIRYU ET AL., U.S. PATENT NO. 5,368,962 (HEREINAFTER KIRYU) AND FURTHER IN VIEW SAWAYAMA ET AL., U.S. PATENT NO. 6,184,960 (HEREINAFTER SAWAYAMA)

On pages six through eight of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Tsuda, Shimada and Kiryu to form unevenness on a photosensitive resin only from a front side, as taught by Sawayama, for the stated purpose "to obtain a substrate with a reflective electrode by a simple method without corroding the electrode." This rejection is respectfully traversed.

With regard to the Examiner's newly cited reference of Sawayama, the Examiner stated the following in the paragraph spanning pages eight and nine of the statement of the rejection:

> Further, Sawayama et al. discloses a method of making a reflective type LCD in which the exposure for forming unevenness on a photosensitive resin 24 is conducted only from a front side as shown in Figs. 7A-7I (col. 5, lines 28-44). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the reflection type liquid crystal display of Tsuda et al. with the teaching of Sawayama et al. by having the exposure for forming the unevenness on the insulating film conducted only from a front side so as to obtain a substrate with a reflective electrode by a simple method without corroding the electrode (col. 15, lines 45-51).

For ease of reference the Examiner cited passage of column 15, lines 45-51 have been reproduced below:

> When the reflective electrode 4 is formed on the interlayer insulator 29 provided with minute unevenness, using a photosensitive resin, by any procedure described in Embodiments 1 through 3, a substrate with the reflective electrode 4 can be obtained by a simple method without corroding the connecting electrode 3 made of ITO and the reflective electrode 4 made of Al. The production steps of the present invention can be made more effective by using the following procedures.

Upon reviewing this passage, Applicants respectfully submit that the Examiner's cited passage does not support the proposed modification (i.e., form unevenness only from a front side). This passage fails to specifically state that the alleged benefit (i.e., to obtain a substrate with a reflective electrode by a simple method without corroding the electrode) is a result of forming unevenness only from a front side. Instead, Sawayama states in column 12, line 65 through column 13, line 3 the following:

> According to the present invention, by using a metal film as the protective film 9 and adopting an Al/protective metal film/ITO structure, the problem of electrolytic corrosion is overcome, and an increase in the number of steps of photolithography is prevented by appropriately selecting a protective metal film and an etchant.

As evident from this passage, the alleged benefit of obtaining a substrate with a reflective electrode by a simple method without corroding the electrode is a result of using a metal film as a protective film and adopting an Al/protective metal film/ITO structure. Thus, the Examiner has improperly attributed the alleged benefit to forming unevenness only from a front side since

Sawayama clearly states that the alleged benefit is a result of an entirely different feature. The Examiner, therefore, has not established a reasonable expectation of success in obtaining the alleged benefit since there is no teaching within Sawayama that the alleged benefit would result from the limitation for which Sawayama is being cited. For the reasons stated above, Applicants respectfully solicit withdrawal of the imposed rejection of claim 16 under 35 U.S.C. § 103 for obviousness based upon Tsuda in view of Shimada, Kiryu, and Sawayama.

CLAIM 17 IS REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON TSUDA IN VIEW OF SHIMADA AND SAWAYAMA

On pages eight through eleven of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Tsuda and Shimada to form unevenness on a photosensitive resin only from a front side, as taught by Sawayama, for the stated purpose "to obtain a substrate with a reflective electrode by a simple method without corroding the electrode." This rejection is respectfully traversed.

Applicants incorporate herein the arguments previously presented with regard to the Examiner's citation of Sawayama with regard to the rejection of claim 16. Specifically, the Examiner has not established a reasonable expectation of success in obtaining the alleged benefit of Sawayama (i.e., to obtain a substrate with a reflective electrode by a simple method without corroding the electrode) since there is no teaching within Sawayama that the alleged benefit would result from the limitation (i.e., form unevenness only from a front side) for which Sawayama is being cited. The Examiner is citing Sawayama to supply the same limitation for the same alleged benefit in the Examiner's rejection of claim 17. Therefore, for the same reasons

previously discussed with regard to claim 16, Applicants respectfully solicit withdrawal of the imposed rejection of claim 17 under 35 U.S.C. § 103 for obviousness based upon Tsuda in view of Shimada, and Sawayama.

CLAIMS 2 AND 4 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON SAWAYAMA IN VIEW OF SHIMADA AND FURTHER IN VIEW OF TAKATSU ET AL., U.S. PATENT NO. 5,434,026 (HEREINAFTER TAKATSU)

On pages eleven through thirteen of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the methodology of Sawayama in view of and Shimada and Takatsu to arrive at the claimed invention. This rejection is respectfully traversed.

Applicants respectfully submit that one having ordinary skill in the art would not have arrived at the claimed invention by modifying Sawayama and Shimada in view of Takatsu. Claim 2 recites that the inseparable pattern and separable pattern are exposed using different masks, and the exposure amount for the inseparable pattern is 20 to 80% of the exposure amount for the separable pattern. The Examiner referred to Fig. 1c of Takatsu to teach exposure of a mask at different exposure intensities. However, Fig. 1c of Takatsu refers only to different positions of a single mask during a single exposure. In contrast, the claimed invention is directed to two masks and two different exposures. Thus, Takatsu fails to teach the limitations for which Takatsu is being relied upon by the Examiner. Applicants, therefore, respectfully solicit withdrawal of the imposed rejection of claims 2 and 4 under 35 U.S.C. § 103 for obviousness based upon Sawayama in view of Shimada and Takatsu.

Applicants respectfully submit that newly added claim 19 is allowable over the applied prior art. Claim 19 recites that a semiconductor film is formed in a region where any opaque metal film is not formed and which is a picture element region excluding the region where scanning lines, signal lines and contact holes are formed. In such a configuration, since the semiconductor film is formed with the picture element region and no UV light is transmitted, a light reflected from the substrate holder on the backside of the substrate is suppressed, and the photosensitive resin is prevented from photosensitizing due to unnecessary light, such as reflected light, resulting in an exposure being permitted only from the front side. This feature is neither taught nor suggested by the applied prior art.

Applicants have made every effort to present claims which distinguish over the prior art, and it is believed that all claims are in condition for allowance. However, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. Accordingly, and in view of the foregoing remarks, Applicants hereby respectfully request reconsideration and prompt allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account 500417, and please credit any excess fees to such deposit account.

Respectfully submitted,

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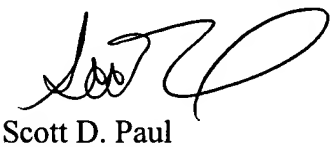

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